# The Zone Displays – Status and Error Messages

| Display German | Display English | Meaning | Rectification of the error in case of an error message |
|---|---|---|---|
| Stb | **MA** | Regulation mode | |
| FSt | **CoU** | Zone in pilot regulation | |
| Afb | **StA** | Start-up mode active | |
| Id | **Id** | Identification active | |
| Fb | | Sensor failure | Sensors defective.<br>In order to be able to keep operating the zones in the regular mode, the sensors need to be exchanged immediately; otherwise the zones in the Regulation mode or in the pilot regulation zone will switch and continue working with defective sensors. |
| FP | **tCb** | Sensor reverse voltage | Sensor connections are confused.<br>Swap over the two sensor wires + and – of the corresponding zones. |
| FuS | **FuS** | Fuse alarm only for HRD | Wiring error. The error is saved and needs to be acknowledged. |
| Err | **Err** | Data error in channel data | Change to the parameter level and change a value, then acknowledge the change. The error message will then disappear. Alternatively, enter code number 950. |
| AL | **AL** | Maximum temperature / upper measuring range limit exceeded | The actual value of the zones has exceeded the measuring range limit or the maximum temperature (500°C). The heating output for the corresponding zone is switch off. The error is saved and needs to be acknowledged.<br>If the error comes before the error message I-, the power unit may be defective. Please exchange.<br>Likewise, errors in the sensors are possible. Please observe the actual value.<br>Please contact the supplier for a quick remedy. |
| IF | **IF** | Error message “No heating current is measured” during the identification phase | The controller switches off the zones and checks in cycles whether a heating current can be measured or not.<br>Reason for error: Fuse failure, heater failure or the connection cable to the heater is defective. |
| SbY | **SbY** | Temperature reduction / Standby active | |
| bSt | **bSt** | Temperature increase / Boost active | |

| **Display German** | **Display English** | **Meaning** | **Rectification of the error in case of an error message** |
|---|---|---|---|
| dIA | **dIA** | Diagnosis function active | |
| Ar | **Ar** | Automatic ramp active | |
| Ar. | **Ar.** | Automatic ramp active, zone is currently the slowest zone | |
| I - | **I-** | Alarm "Current alarm when heating system is off " active | Heating current is measured although no control is triggered. The heating output for the corresponding zone is switched off. Check the power unit and exchange. The error is saved and needs to be acknowledged. |

# Mold Check Function

## Diagnosis Process

| Display German | Display English | Meaning |
|---|---|---|
| D ON | **D ON** | |
| VeDI | **WiDI** | Wiring diagnosis |
| I DI | **I DI** | Current diagnosis |
| TiDI | **TiDI** | Temperature increase (time) diagnosis |
| ZoDI | **ZoDI** | Zone diagnosis |
| DOFF | **DOFF** | End of diagnosis |

## Diagnosis Results

| Display German | Display English | Meaning |
|---|---|---|
| Vedr | **Wrng** | Wiring diagnosis result<br>No display, no wiring faults detected.<br>FUS display (safety alarm), a fault was found on the heating system connection in this zone. |
| IAbl | **ILek** | Leakage current diagnosis result<br>Value 000 – 999mA |
| TCP | **TCP** | Sensor reverse voltage result<br>No display, sensors are OK.<br>Reverse voltage is shown with a Fp sensor reverse voltage. |
| TC | **TC** | Sensors results<br>No display, sensors are OK.<br>Fb display, for sensor failure and/or no sensors connected.<br>Digits 1 – n, shows the position of the mistaken sensors.<br>888 display, no temperature increase recognized in the given testing time. |
| IOn | **IOn** | Measuring current when the heating system is switched on<br>Value 00.0 – 99.9A |
| IOff | **IOff** | Measuring current when the heating system is switched off<br>Value 00.0 – 99.9A |

# List of Parameters

| Parameter German | Parameter English | Meaning |
|---|---|---|
| SOLL | **SP** | Set point |
| STGR | **OPWR** | Degree of operation |
| STBE | **MANU** | Manual mode |
| GW- | **ALLO** | Lower temperature limiting value GW- |
| GW+ | **ALHI** | Upper temperature limiting value GW+ |
| ATOL | **AMPT** | Tolerance of heater current |
| ASOL | **AMPN** | Set point heater current |
| 2SOL | **SP2** | 2nd set point/2nd lowering value |
| 3SOL | **SP3** | 3rd set point/3rd lowering value |
| 4SOL | **SP4** | 4th set point/4th lowering value |
| XP-H | **XP-H** | Proportional band Heating |
| TD-H | **TD-H** | Derivative time Heating |
| TI-H | **TI-H** | Integral time Heating |
| TA-H | **CT-H** | Cycle time Heating |
| STGH | **OUTH** | Reduction degree of operation Heating |
| STG% | **OUT%** | Maximum degree of operation in manual mode |
| SOL- | **SPLO** | Lower set point limit |
| SOL+ | **SPHI** | Upper set point limit |
| ANFB | **STMO** | Startup mode |
| ANFZ | **STT** | Startup time of startup mode |
| AFZ2 | **STT2** | Startup time 2nd set point/ 2nd lowering value |
| AFZ3 | **STT3** | Startup time 3rd set point/ 3rd lowering value |
| DIAT | **DIAT** | Diagnostic time |
| OFFS | **OFFS** | Temperature offset |
| ONLK | **ONLC** | Online control function |
| IDEN | **IDEN** | Identification Heating |
| APPL | **APPL** | Application |
| FBA | **TC-A** | Automatic function if thermocouple breaks |
| FAL | **TCAL** | Monitoring sensor short circuit FAL |
| TRMP | **TRMP** | Temperature ramp |
| ARMP | **ARMP** | Automatic temperature ramp |
| K-FZ | **K-CO** | Amplification factor for lead zone control |
| NrFZ | **NoCO** | Lead zone |
| ZONE | **ZONE** | Zone |
| GPNr | **GPNr** | Group number |
| GPM | **GPM** | Group mode |
| PTOL | **PTOL** | Process tolerance |

# List System Parameters

| Parameter German | Parameter English | Meaning |
|---|---|---|
| ADR | **ADDR** | Controller address |
| PROT | **PROT** | Protocol |
| BAUD | **BAUD** | Baud rate |
| STOP | **STOP** | Number of stop bits |
| PARI | **PARI** | Parity |
| CANB | **CANB** | Baud rate CAN |
| CADR | **CADR** | CANopen base address |
| A-OP | **A-OP** | Autooperational mode CANopen |
| OPEN | **OPEN** | CANopen protocol |
| A1D1 | **A1D1** | Definition byte 1 - alarm port 1 |
| A1D2 | **A1D2** | Definition byte 2 - alarm port 1 |
| A1D3 | **A1D3** | Definition byte 3 - alarm port 1 |
| A2D1 | **A2D1** | Definition byte 1 - alarm port 2 |
| A2D2 | **A2D2** | Definition byte 2 - alarm port 2 |
| A2D3 | **A2D3** | Definition byte 3 - alarm port 2 |
| A3D1 | **A3D1** | Definition byte 1 - alarm port 3 |
| A3D2 | **A3D2** | Definition byte 2 - alarm port 3 |
| A3D3 | **A3D3** | Definition byte 3 - alarm port 3 |
| DISP | **DISP** | Display, if zone is passive (BA) |
| SEN | **SEN** | Sensor type zone 1...6 |
| CELS | **CELS** | °C/°F |
| INPD | **INPD** | Function of digital inputs |
| ADEF | **AMPD** | Measurement procedure heating current |
| AGAP | **GAP** | Tolerance band for automatic temperature ramp |
| ASTB | **DIS%** | Display in manual mode (BA) |
| OFF1 | **OFF1** | Module offset 1 |
| OFF2 | **OFF2** | Module offset 2 |
| OFF3 | **OFF3** | Module offset 3 |
| OFF4 | **OFF4** | Module offset 4 |
| OFF5 | **OFF5** | Module offset 5 |
| SPRA | **LANG** | Language (BA) |
| MADR | **MADR** | Modbus basic address |
| H-FR | **H-EN** | Auto start switch-on time |
| LTD1 | **LTD1** | Load separation def. 1 |
| LTD2 | **LTD2** | Load separation def. 2 |
| LTD3 | **LTD3** | Load separation def. 3 |
| IABM | **CMAX** | Maximum divert current (Regulation) |
| IABD | **CMAD** | Maximum divert current (Diagnosis) |
| FGP | **FGP** | Remote control group |
| ZADR | **ZADR** | Zones Offset |

# How To Change System Parameters

All system parameters are compiled in the system memory. They equally apply to all zones.

Step 1 **Select system parameter memory**
Press and hold keys for 3 seconds.
The letters SYS will appear briefly.

Step 2 **Press key**
The set values of the parameter selected will appear in the zone displays .

Step 3 **Confirm input**

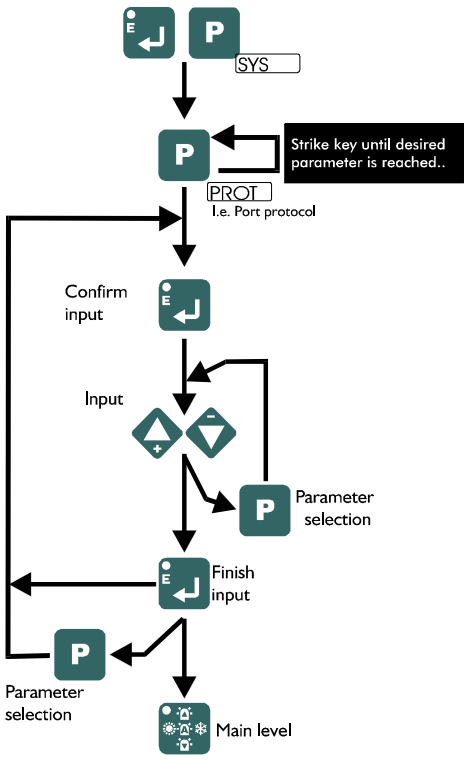
Step 4 **Enter desired value.**

Select next parameter if necessary.

Step 5 **Confirm change / finish input**

Step 6 **Select next parameter if necessary**

Step 7 **Return to actual data / deviation display**




E.g. to change the system parameter LANG start with Step 1 and select the system parameter as shown in Step 2. To toggle the language between German (0) and English (1) enter the desired value as shown in Step 4. Execute all further steps to finish the dialog.